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European Federation of Pharmaceutical  
Industries and Associations

# DIABETES:

## EUROPE'S SILENT HEALTH PANDEMIC





## CREATING A COLLABORATIVE ENVIRONMENT FOR HEALTH ADVANCEMENTS

The COVID-19 pandemic has placed a spotlight on something we have known for a long time – diabetes, and its related complications, is Europe's silent health pandemic – and it is only getting worse. It is more urgent

than ever that diabetes is prioritised by Europe's policy-makers. Momentum is needed now to prioritise diabetes management, eliminate misconceptions across Europe, and drive a shift in policy to give diabetes the focus it needs.

## ESTABLISHING A HEALTHIER FUTURE FOR EUROPE

Our vision is an environment where people with diabetes (PwD) are diagnosed earlier, and provided with the tools and education to self-manage effectively. Ultimately, we want all PwD to live life to its fullest, despite the constraints of the daily management of their condition.

We see a future where diabetes is recognised as a growing pandemic and the seriousness and challenges of living with the disease in the short and long-term are well understood. That means a future in which PwD can expect effective care at the right time, delivered in the right way.

By using health data to achieve better outcomes, empowering PwD through new innovations and encouraging health systems to focus on the integration of diabetes care, policy-makers can ensure better outcomes for PwD. Once achieved, our ambition is for diabetes to serve as a blueprint for integrated care and world-class treatment for chronic diseases.

## DIABETES IN EUROPE

Diabetes is Europe's silent health pandemic. Its relentless impact on people living with diabetes gets worse overtime and there is no cure.

If PwD represented a European country, its population would be equivalent to that of Italy. That is 60 million citizens, all living with diabetes. Every single one of these cases is one too many – but it is only set to rise, and will reach up to 66 million people by 2030.<sup>1</sup> This means it would become the third largest *country* by population in the EU – almost as large as the United Kingdom today.<sup>2</sup>

Despite its increasing prevalence and worsening outcomes as the disease progresses, the seriousness and severity of diabetes has been underestimated in Europe. Each year, at least 114,000 people die from diabetes-related complications, five times more than in road accidents across Europe (25,000).<sup>3,4</sup> Worldwide, someone dies from diabetes-related complications every eight seconds.

For people with diabetes, self-managing the disease is a full-time responsibility and life-changing commitment, yet PwD are usually only able to see a healthcare professional for a few minutes, up to four times a year. For the rest of the time, PwD are all on their own. Self-management is a round-the-clock job, with no breaks, no holidays and no time off.

Diabetes is misperceived as a disease linked to lifestyle choices. Like many other conditions, factors such as diet, physical activity and smoking do play a role in risk and outcomes of diabetes, but there are underlying clinical causes of diabetes which are exacerbated by environmental factors.<sup>5</sup> People can develop the disease due to inherited biological traits, and its progression can be impacted by socio-economic status, availability of healthy food and safe outdoor space.<sup>6</sup>

While PwD work hard every day to reduce risk to their health, they must be further supported by healthcare systems. Healthcare systems require new approaches to improve the outcomes for people living with diabetes, ensuring they can live life as healthily as possible.

The first step is to recognise the seriousness of the disease not just in terms of its prevalence across Europe – but its impact on individuals day-to-day, long-term, and on overall quality of life. Prevention, early diagnosis, and improvements in how the disease is managed make a significant difference to PwD.





# DIABETES IS EUROPE'S SILENT HEALTH PANDEMIC



The current size of the diabetes population in Europe is equivalent to that of the population of Italy. Diabetes prevalence in Europe is increasing and healthcare systems require new approaches to prevent and treat PwD, ensuring they can age as healthily as possible.

The number of adults living with diabetes has more than tripled over the past 20 years.<sup>6</sup> Today, around 60 million people are living with diabetes in Europe. This will increase to a population of 66 million people by 2030<sup>7</sup> – making PwD the sixth largest country by population in the whole of Europe – almost the size of the United Kingdom.

As life expectancy continues to rise, Europeans will spend more of their life managing chronic diseases such as diabetes. The burden of diabetes is set to increase globally by approximately 60% between 2020 and 2040. Because rising life expectancy is not in line with healthy life expectancy, later years in life are spent in poorer health.<sup>8</sup> Healthy ageing is crucial to sustaining work productivity in Europe.<sup>9</sup>

Diabetes care is a significant financial challenge for healthcare systems across Europe. An estimated 9% of total health expenditure goes towards diabetes, and this is expected to rise by 12% over the next 25 years.<sup>10</sup> In 2019, the total diabetes-related expenditure to healthcare systems in Europe was €147.9 billion.<sup>11</sup> This is a greater annual spend than that of cancer at €103 billion.<sup>12</sup>



Each year, 114,000 people die from diabetes-related complications such as heart attacks and strokes compared to 25,000 killed in road accidents across Europe.<sup>13,14</sup> The seriousness and severity of diabetes has been underestimated despite worsening outcomes as the disease progresses.

Compared with healthy populations, people with Type 2 diabetes are 2-3 times more likely to experience heart failure, more likely to suffer a heart attack or stroke, and over 50% die of cardiovascular complications.

In addition, 2.6% of PwD lose their vision entirely,<sup>15</sup> and up to 20% die of kidney failure.<sup>16</sup> Those with diabetes are 15 times more likely to have to undergo amputation than those without it.<sup>17</sup>

Over time, 19% of people with Type 2 diabetes suffer reduced cognitive function over time, ultimately leading to dementia, which makes self-management of diabetes in older people nearly impossible.<sup>18</sup>

COVID-19 is a serious health risk for PwD. COVID-19 patients with diabetes have so far shown a two-fold increase in mortality rate. Every eight seconds, someone around the world dies from diabetes-related complications.



## GAVIN

### Working dad, living with diabetes

Diabetes has been part of my life for the past 21 years, but it does not define me. Sure, it can be annoying that I cannot just go where I want without having the right equipment to manage it on the move, but it is my responsibility to manage it properly and to stay healthy.

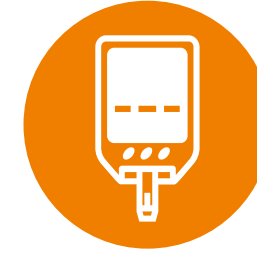
I used to gamble with what I thought I needed to stay healthy over the course of the day which led to feelings of stress and anxiety. I put my emotional well-being at risk as I was juggling self-testing and breaking up my busy working day. For me, technology has been a game changer. I'm a runner and I have to carefully manage my runs and marathons, consider how long I'm exercising for, when to inject, and when and what to eat. Being able to monitor my blood sugar levels continuously and to see the trend instead of a single point in time allows me to make better choices for myself.

But this is only my story. People with diabetes are not all the same, no matter the type. We are individuals with our own experiences.





## SELF-MANAGING DIABETES IS A DIFFICULT AND RELENTLESS TASK



**Diabetes self-management is a round-the-clock, relentless task which those living with diabetes face with little support.**

PwD are typically only able to see a healthcare professional for just a few minutes, up to four times a year. For the remaining time, they must manage it on their own. This includes when and what to eat, not consuming too much sugar found in fruits and natural sources, ensuring they are properly hydrated, and maintaining an optimal level of physical activity.<sup>19</sup> These round-the-clock decisions have to be integrated into daily life and often planned days in advance.

PwD must remain alert to their environmental surroundings throughout the year. Small variations in hormone levels, stress, tiredness, and even the weather, require the constant monitoring of blood sugar levels.<sup>20</sup>



**People living with diabetes are twice as likely to experience depression.**

PwD are twice as likely to experience depression at some point in their lives. As many as 40% of PwD struggle with their mental wellbeing at some point after being diagnosed.<sup>21</sup>

If blood sugar levels are not accurately monitored and the right management decisions are not made, a person with diabetes can experience a delayed negative outcome many years after the incident occurred, which can cause intense anxiety.<sup>22</sup>

### NINNI

#### Shift worker, living with diabetes

I was 6 years old when I was diagnosed with diabetes. My mother tells a story of me cheerfully shouting in the supermarket: 'I have diabetes!' My attitude towards diabetes hasn't always been that positive though – when I was a teenager, I refused to accept that I had diabetes.

Nonetheless, I've never felt that I was different from anyone else. I watch my blood sugar levels and take shots of insulin, but that's not something that can be seen from the outside. The biggest change in the past 20 years or so has been in terms of the equipment used and people's understanding of the disease.

When I was a child, the amount of insulin to take was set for each meal and we did not test blood sugar levels regularly. Now, I'm able to track my blood sugar levels 'live' and see how they have changed throughout the day. At school, nobody really understood what diabetes or its impact was. For example, my teachers were not able to connect my behaviour to my low blood sugar levels. Now, however, people seem to be better aware and are able to more easily find information about diabetes.





# THERE IS NO QUICK AND EASY FIX FOR MANAGING DIABETES



Diabetes is a life-long and progressive disease, which worsens over a person's lifetime. There is currently no cure.

Nearly 1 out of 10 Europeans have diabetes – with type 2 diabetes accounting for more than 90% of all cases.

Type 1 diabetes usually appears during childhood or adolescence, and causes the level of glucose (sugar) in your blood to become too high due to problems with the immune system. Despite extensive research, scientists are yet to discover what causes type 1 diabetes and continue to search for a cure.

By the time Type 2 diabetes is typically diagnosed, it has already come far along – and must be carefully managed for the rest of a patient's life. It is caused by problems with insulin, often due to underlying genetic causes, and means the level of sugar (glucose) in the blood can become too high, leading to problems like excessive thirst and tiredness. Despite extensive research, scientists are yet to discover a cure.

The aim of treatment is to avoid acute episodes – sudden, severe falls in blood sugar levels which could lead to a person fitting or falling unconscious if left untreated. Treatment is also designed to delay the onset of diabetes-related complications such as kidney failure and cardiovascular disease.

PwD aim to live and age well but as the comorbidities relating to the disease progression – such as kidney function, cardiovascular function and eyesight impairment – continue to deteriorate,<sup>18</sup> healthy ageing can become a challenge without appropriate healthcare.



## DIABETES DURING COVID-19

ANA CRISTINA PAIVA

*Diabetes Nurse, Portuguese Diabetes Association*

Portugal, where I live, is a relatively small country with just over 10 million people. But we live in dispersed geographic areas, and that leads to some people having limited access to healthcare.

Covid-19 has been a struggle for us – particularly for those with diabetes. People with diabetes (PwD) have a risk of death from Covid-19 three times higher than that of the general population.

Covid-19 has impacted PwD in many ways. First, the pandemic has, for many, reduced access to healthcare. As a result, there will have been 10-20 thousand people who may not have had a diagnosis of diabetes and an early intervention, which can be hugely helpful in reducing the effects of diabetes.

For those already diagnosed with diabetes, hospitals have had to be innovative and adapt. Many hospitals created telephone or online helplines to guarantee access to health teams, to those that needed it. For my hospital (Associação Protectora dos Diabéticos de Portugal), this meant socially distanced counselling, referral and monitoring care.

Second, unemployment has increased immensely due to the knock-on economic effects of Covid-19. The number of people using the food bank has increased dramatically, leading to major changes in people's eating habits. There is evidence that less privileged groups are more at risk of diabetes – and these people are also less likely to have access to healthcare.

Finally, Covid-19 has, for many people, led to significant lifestyle changes. Different eating patterns, personal habits and the decline in physical activity levels as well as the increase in sedentary behaviours resulting from 'lockdown' have led to an increase in complications from the disease.

But confinement has brought about positive changes for some. Many PwD have taken the opportunity of being at home to improve their eating habits and behaviours, managing their condition more carefully during the pandemic.

Overall, it's been a challenging time, with a demand for innovation and thinking outside-the-box so that everyone that needed to reach us, could.





## HANNAH

### Working mum, living with diabetes

Living with diabetes requires a lot of work. It's a challenge to manage it with work, home, childcare, and other priorities in life. And, often diabetes management is the thing that gets pushed back.

As I get older, I realise my body is being more and more affected by diabetes. Every few weeks, something happens – whether it's an oral thrush, or bumps on your skin, or anything else – and you always know it's related to your diabetes. Having hypoglycaemia can also lead to confusion, inability to understand basic conversations or process information.

I am generally a calm person, but I have had to learn how to manage my emotions and feelings so that I can be there for my toddler, no matter how my diabetes is affecting me that day. And that's my biggest worry, not being able to be there for my family.



**Diabetes is a complex disease that can cause, and be caused by, clinical, socio-economic and environmental problems.**

Like many other diseases, factors such as diet, physical activity and smoking do play a role in risk and outcomes of diabetes – but its underlying cause is genetic.<sup>1</sup>

Environmental factors including socio-economic status severely impact a person's likelihood of developing Type 2 diabetes. The majority of diabetes incidents across Europe occur in low- and middle-income groups, with diabetes-related deaths 3.5 times more likely among the poorest people in the UK.<sup>23</sup>



**By prioritising diabetes we can improve the lives of people living with diseases as well as improve the efficiency of our healthcare systems.**

In European countries, healthcare budgets are often separated for primary and secondary care, and are managed regionally or locally, in isolation from one another. Coordinated approaches are necessary to reduce overall expenditure and ultimately improve patient care.

PwD account for the third largest number of hospital bed days spent in Europe each year at 6.8 million days, behind heart failure and Chronic Obstructive Pulmonary Disease.<sup>24</sup>

The use of digital innovations to track diabetes cases across Europe is a cost-effective solution to improving its management across such a large-scale population.<sup>25</sup> Real-world examples of how innovation can improve management and therefore decrease countries' expenditure can provide a blueprint for success.

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